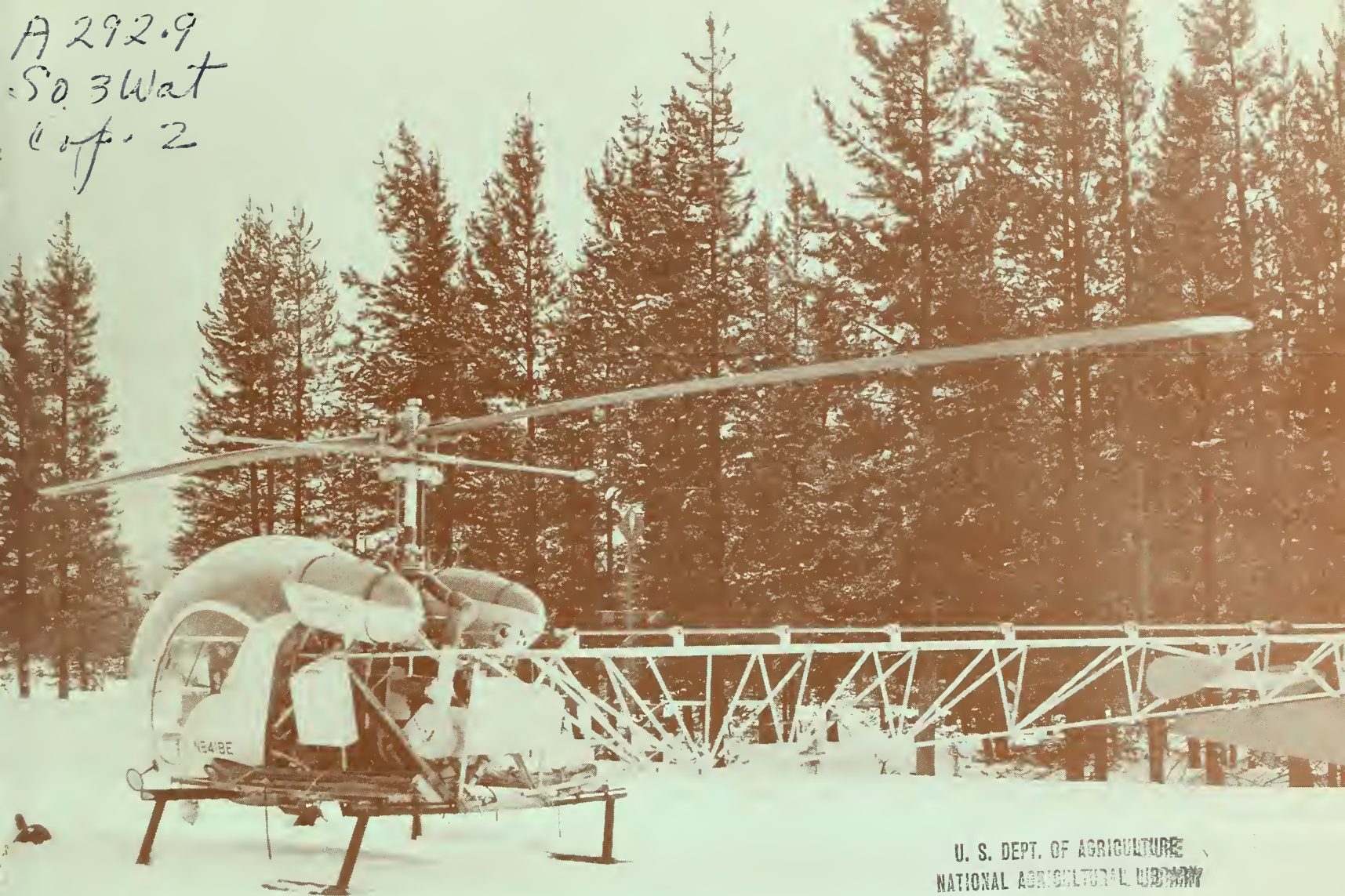


## **Historic, Archive Document**

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CURRENT SERIAL RECORDS

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**IDAHO**

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,  
and  
IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

||||||| AS OF |||||||  
**JAN. 1, 1965**



# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

### PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN. 15 - APR. 1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

### PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**IDAHO**

*Report prepared by*

MORLAN W. NELSON      Snow Survey Supervisor

*and*

J. ALDEN WILSON      Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE  
SNOW SURVEY SECTION  
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*Issued by*

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DEPARTMENT OF RECLAMATION  
BOISE, IDAHO



# WATER SUPPLY OUTLOOK for IDAHO



## GENERAL SUMMARY FOR JANUARY 1, 1965

The winter season of 1965 has started out with record-breaking snowfall. Usually about one-third of the total snowfall is down by the first of January. This year, there are several snow courses scattered throughout Idaho that have a normal accumulation for the entire season already in the snow pack.

Heavy rains during December and warm temperatures at high elevations primed the soils on the watersheds. Generally speaking, the entire State of Idaho has above normal soil moisture and an unusually heavy snow pack as measured near the first of January. Reservoir-stored water throughout the state reflects the heavy streamflow during December. In some cases, floods occurred as a result of frozen soil, deep snow at low elevations that was melted by warm temperatures, and rainfall adding to the runoff.

The "pillow" installation at Bogus Basin snow course recorded interesting data during this period. The "pillow" is a nylon reinforced butyl tube about 6 inches thick and 12 feet across. The tube is filled with methanol and connected to a vertical standpipe which is protected by a small building. As snow falls on the "pillow" or melts off from the "pillow", the level of the fluid in the standpipe varies in accordance with the water content of the snow. A float in the standpipe is connected to a recording device. The recorder makes a permanent record on a chart of the increase or decrease in water content of the snow.



This "pillow" installation recorded the changes in the snow pack by the hour as they occurred during the flood period. Starting about six o'clock on the morning of December 22nd, the snow pack at Bogus Basin lost water content until 8:00 P.M., December 23rd. During this period, 1.8 inches of water was released from the snow pack by the warm temperatures and rainfall occurring at this elevation. Contrary to common belief, the snow pack does not absorb significant amounts of rainfall. Rather, the rainfall melts a slight portion of the snow pack and runs through the snow and into the soil. If the soil is frozen beneath the snow pack as it was in areas in Idaho, extremely high and fast runoff occurs. The "pillow" has made an accurate recording of the snow-water content at Bogus Basin as determined by conventional snow tube measurements. The interesting technical point is that the snow pack water content dropped about two inches during this period and then regained it again within three days. This phenomena resulted in floods in many areas of Idaho. At the lower elevations, the snow pack melted off entirely.

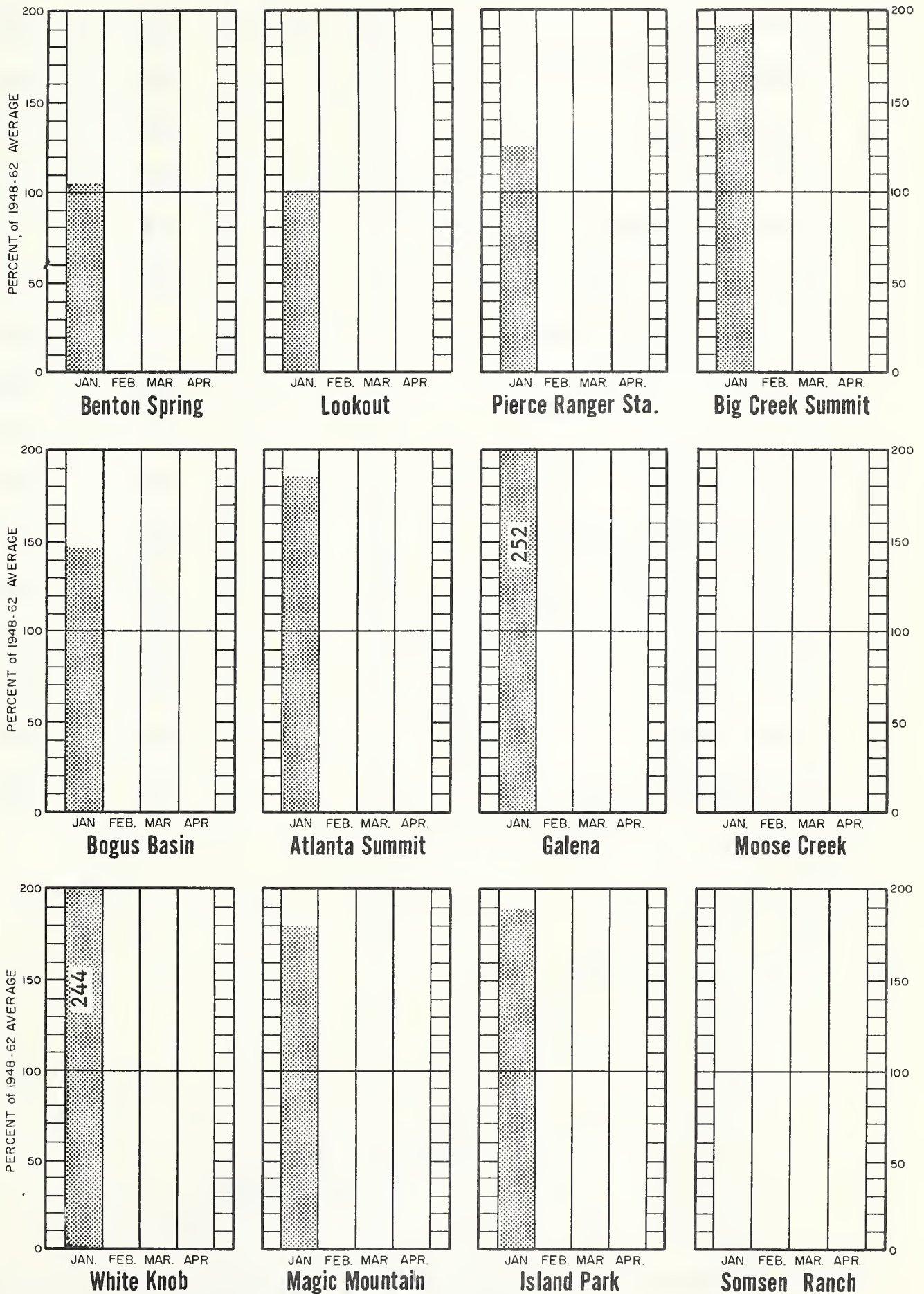
A continuation of the trend of storms that has occurred during the Fall of 1964 and beginning of 1965 would result in extremely heavy volumes of water stored in the snow pack in the mountains and valleys of Idaho.



# SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses  
As Compared To 1948-62 15Yr. Average

JANUARY 1, 1965

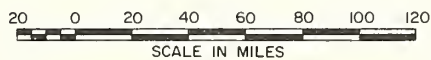


# COMPARISON of SNOW COVER

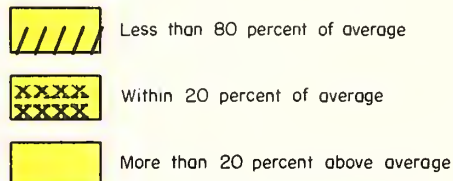
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1948-62 AVERAGE
Priest River	2-4	102	121
Spokane River	1-2	133	100
Clearwater River	3-7	150	128
Palouse River	5	139	123
Salmon River	6-11	240	186
Camas-Beaver Creek	2	238	155
Upper Snake	20	224	170
Henry's Fork-Teton River	6-8	223	162
Little Lost River	3	188	159
Big Lost River	1	253	244
Big Wood River	5-7	299	254
Raft River-Goose Creek	1-6	289	250
Salmon Falls Creek	7-9	239	260
Boise River	5-9	298	187
Payette River	5-9	237	140
Bruneau River	3	283	190
Owyhee River	2	278	181

# PROSPECTIVE STREAMFLOW

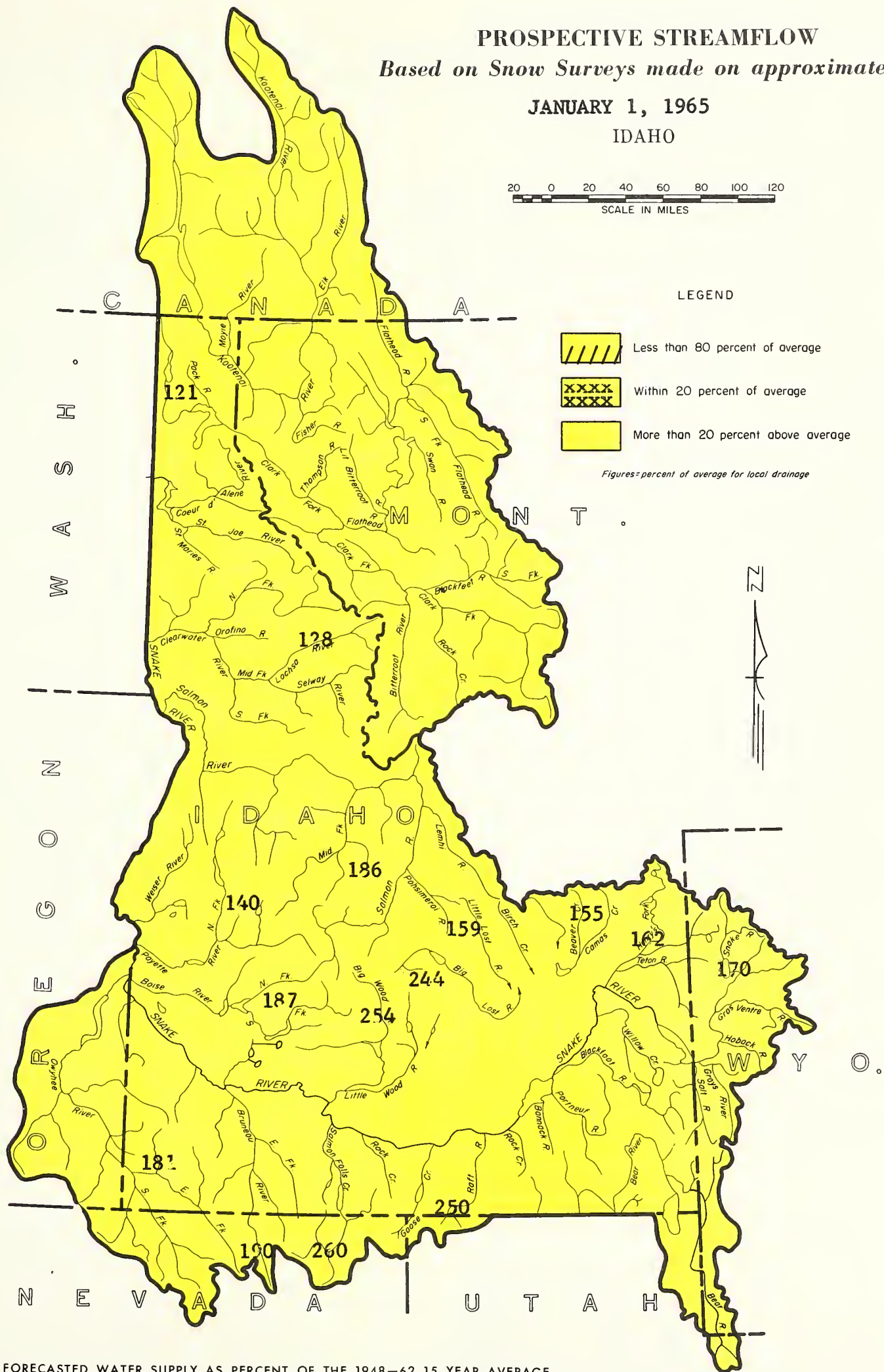
Based on Snow Surveys made on approximately  
JANUARY 1, 1965  
IDAHO



## LEGEND



Figures-percent of average for local drainage





# RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948 - 62 AVERAGE
<u>UPPER COLUMBIA BASIN</u>				
<u>Clark Fork - Pend Oreille</u>				
Hungry Horse	3428.0	3222.0	2955.0	2954.5*
Flathead	1791.0	1406.0	1532.0	1297.0
Pend Oreille	1561.0	1280.7	631.1	726.5
Noxon	334.6	330.5	326.7	--
<u>Spokane</u>				
Coeur d'Alene	238.5	366.0	117.2	168.1
<u>SNAKE BASIN</u>				
<u>Snake</u>				
Jackson Lake	847.0	609.5	607.9	399.4
Palisades	1200.0	942.9	825.4	484.7*
American Falls	1700.0	1049.8	883.7	1143.0
Island Park	127.0	104.0	64.9	79.3
Grassy Lake	15.2	11.7	7.7	11.3
Brownlee	980.2	917.0	724.0	--
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	11.0	9.3	10.3
<u>Salmon Falls Creek</u>				
Salmon Falls	182.6	30.2	27.4	15.1
<u>Big Lost</u>				
Mackay	44.2	31.8	34.4	25.0
<u>Big Wood</u>				
Magic	191.5	131.0	102.0	90.3
<u>Little Wood</u>				
Little Wood	30.0	17.9	15.6	4.7*
<u>Boise</u>				
Anderson Ranch	423.2	365.0	306.1	178.2
Arrowrock	286.6	266.8	238.4	163.5
Lucky Peak	278.2	94.1	25.7	96.6*
Lake Lowell (Deer Flat)	169.0	133.8	116.3	85.5
<u>Owyhee</u>				
Owyhee	715.0	643.5	266.6	316.5
<u>Payette</u>				
Cascade	653.2	441.0	345.4	200.2*
Deadwood	161.9	82.8	80.0	61.6
<u>GREAT BASIN</u>				
<u>Bear</u>				
Bear Lake	1421.0	881.1	700.0	882.4
*Period of record.				

# RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JANUARY 1, 1965

50 0 50 100 150  
SCALE IN MILES

Contents  
RESERVOIR  
Capacity

330.5  
NOXON  
334.6

1280.7  
PEND OREILLE  
1561.0

3222.0  
HUNGRY HORSE  
3428.0

366.0  
COEUR D'ALENE  
238.5

1406.0  
FLATHEAD LAKE  
1791.0

31.8  
MACKAY  
44.2

82.8  
DEADWOOD  
161.9

104.0  
ISLAND PARK  
127.0

441.0  
CASCADE  
653.2

11.7  
GRASSY LAKE  
15.2

917.0  
BROWNLEE  
980.2

609.5  
JACKSON LAKE  
847.0

643.5  
OWYHEE  
715.0

942.9  
PALISADES  
1200.0

133.8  
LAKE LOWELL  
169.0

1049.8  
AMERICAN FALLS  
1700.0

94.1  
LUCKY PEAK  
278.2

881.1  
BEAR LAKE  
1421.0

266.8  
ARROWROCK  
286.6

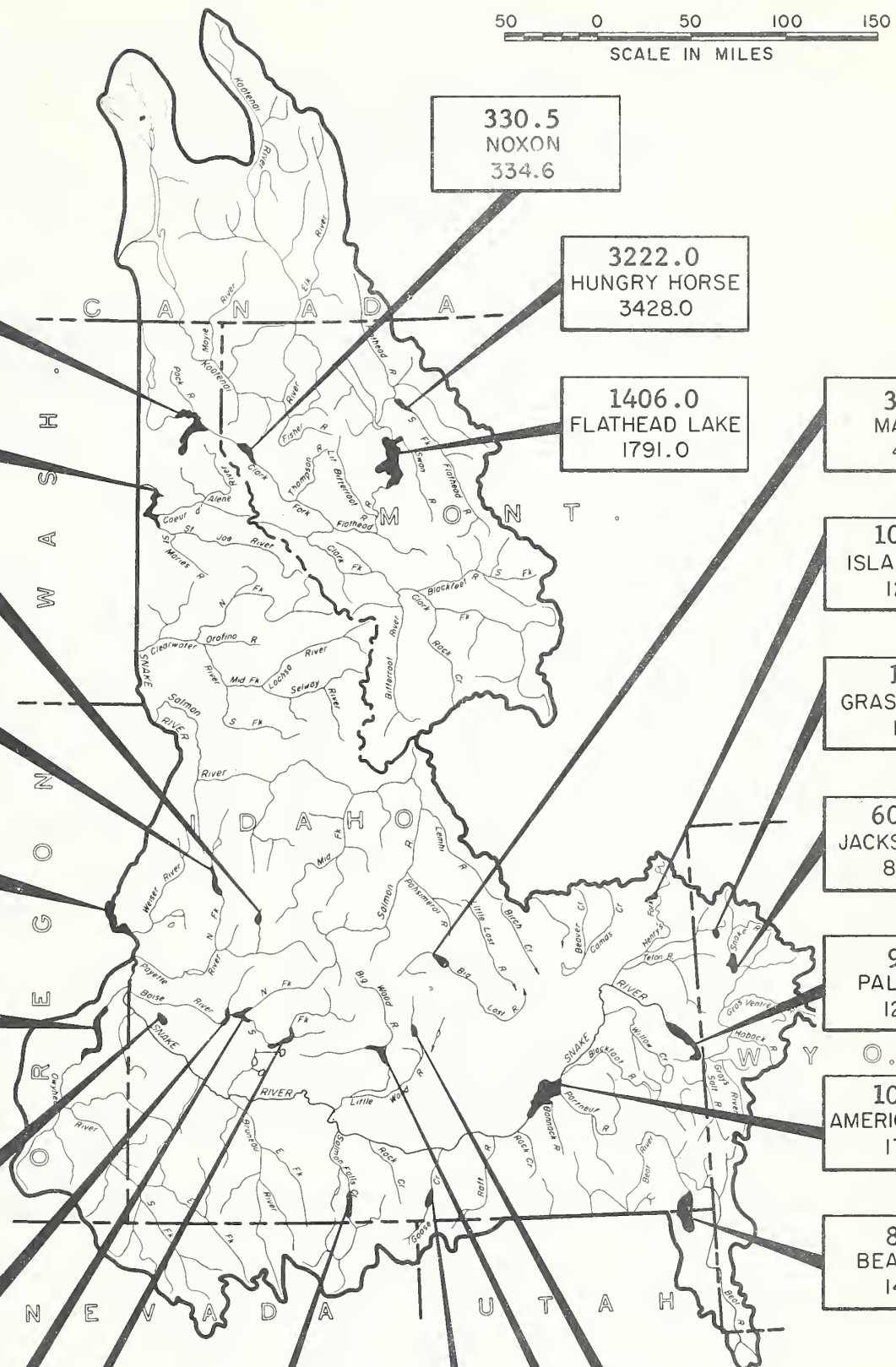
17.9  
LITTLE WOOD  
33.3

365.0  
ANDERSON RANCH  
423.2

30.2  
SALMON FALLS  
182.6

11.0  
OAKLEY  
74.4

131.0  
MAGIC  
191.5



# VALLEY PRECIPITATION 1/

## Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Fall		Winter	
	Sep.-Oct.-Nov. 1964		December 1964	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U. S.	7.01	+0.09	4.62	+1.30
Flathead	5.41	-0.18	5.19	+3.08
Clark Fork	1.59	-1.26	3.61	+2.67
Pend Oreille-Spokane	7.26	-1.68	7.06	+2.80
Upper Snake	3.90	-0.80	5.16	+2.70
Snake River Plain	2.28	+0.29	3.19	+2.23
Salmon-Payette-Boise	3.75	-0.66	7.73	+5.19
Clearwater	6.39	-0.65	6.43	+3.45
Southeastern Oregon	2.26	+0.06	3.39	+2.18

1/ Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

2/ Departure from 15-year (1948-62) drainage division average.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

PEND OREILLE - PRIEST RIVER

Benton Meadow	16A2	2344	12/31	36	5.8	2.5	3.4
Benton Spring	16A3	4900	12/31	45	9.6	7.4	9.3
Schweitzer Bowl	16A6	4500	12/29	70	14.0	16.2	--
Schweitzer Ridge	16A5	6100	12/29	87	21.3	23.6	--

SPOKANE RIVER

Fourth of July Smt.	16B3	3100	12/30	22	4.7	4.0	--
Lookout	15B2	5250	12/30	69	17.6	12.8	17.6*

CLEARWATER RIVER

Above Greer	16C11	1240	12/30	9	2.4	T	--
Buck Meadows	15D5	5600	12/29	41	12.1	--	--
Cayuse Airstrip (A)	15C3	3700	1/5	41	9.3	2.8	4.1*
Crater Meadows (A)	15C9	6100	1/5	83	21.2	14.5	--
Fish Lake Airstrip(A)	15C2	5000	1/5	75	19.1	12.8	18.2*
Goat Lake (A)	14C9	6600	1/5	87	22.2	14.2	--
Greer Summit	16C13	3000	12/30	11	2.2	T	--
Hemlock Butte (A)	15C6	5500	1/5	93	23.7	20.0	--
Midway	16C12	2200	12/30	10	1.6	T	--
Mountain Meadows	15D6	6300	12/29	43	12.7	--	--
Pierce Rgr. Sta.	15C5	3171	12/28	30	6.8	4.4	5.3*
Shanghai Summit (A)	15C4	4600	1/5	59	15.0	9.4	--

PALOUSE RIVER

Crumarine Creek	16C6	3500	12/31	19	4.1	3.0	2.7*
East Twin	16C3	4000	12/31	27	6.7	4.7	5.4*
Howard Creek	16C5	3500	12/31	13	2.9	2.3	2.2*
Moscow Mountain	16C2	4800	12/31	35	8.6	6.1	7.0*
West Twin	16C4	4200	12/31	18	4.3	3.0	4.3*

LOWER SALMON RIVER

Big Creek Summit	15E2	6600	1/8	104	31.2	11.7	--
#Boulder Creek	16D1	5500	12/31	72	18.6	6.8	--
Chapman Creek	16D2	4215	12/30	13	2.6	1.7	1.8*
#Deadwood Summit (A)	15E4	7000	1/1	144	40.9	16.3	--
Johns Creek	16D3	3805	12/30	11	2.2	0.9	1.2*
#Rock Flat Summit	16E1	5200	12/29	45	9.4	4.9	7.8
#Squaw Flat (A)	16E5	6230	1/1	72	18.7	9.7	--
#Squaw Meadows (A)	15D2	5800	1/1	95	27.0	12.4	--
Whitebird Summit	16D5	4390	12/30	17	3.4	2.7	2.5*

(b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

UPPER SALMON RIVER

#Galena Summit	14F12	8795	1/6	110	29.2	8.4	9.8*
#Gibbons Pass	13D2	7100	1/4	56	16.4	8.1	10.8*
Morgan Creek Summit	14E4	7580	12/31	63	14.6	4.3	--

MEDICINE LODGE - CAMAS - BEAVER CREEKS

Camp Creek	12E3	6800	12/28	32	6.5	2.8	3.7
Kilgore	11E12	6200	12/28	29	5.9	2.4	4.3*

HENRY'S FORK RIVER

Big Springs	11E9	6500	12/31	58	13.3	5.8	7.9
Grassy Lake	10E15	7230	12/29	70	22.6	10.1	14.7
Island Park	11E10	6315	12/30	55	11.5	4.5	6.1
Valley View	11E8	6500	12/30	45	11.2	4.6	5.5

Teton River

Darby Canyon (A)	10F21	8250	12/31	48	14.1	7.9	--
Pine Creek Pass	11F2	6750	12/30	38	10.9	4.9	--
State Line	11F1	6400	12/30	32	9.0	4.0	6.1
Teton Pass	10F13	8500	12/30	70	20.6	9.0	14.0

LITTLE LOST RIVER

Fairview Guard Sta.	13E5	5850	12/31	19	3.3	2.0	2.3*
Lost-Garfield	13E3	5700	12/30	15	2.6	2.0	2.0*
Sawmill Canyon	13E4	6000	12/31	32	7.8	3.3	4.3*

BIG LOST RIVER

White Knob	13F1	7700	12/28	35	6.6	2.6	2.7*
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LEMHI RIVER

Gertson Creek (A)	13D17	8050	12/28	18	4.2	3.2	--
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PORTNEUF RIVER

Pebble Creek	12G2	6550	1/4	33	10.6	3.6	--
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BEAR RIVER

Emigrant Summit	11G6	7350	12/29	63	17.6	6.6	--
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(b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

Montpelier Creek

Giveout	11G16	6840	12/30	35	8.2	4.4	--
Little Beaver	11G20	6970	12/30	46	12.0	5.2	--
Montpelier Creek	11G18	6570	1/6	24	7.2	2.5	--
Whiskey Flat	11G21	6985	12/30	33	7.7	4.0	--

BIG WOOD RIVER

#Couch Summit	14F10	6950	1/1	62	16.1	6.7	--
Dollarhide Summit (A)	14F8	8620	1/1	86	24.4	9.0	11.0*
Galena	14F1	7500	12/30	76	19.9	6.6	7.9*
Galena Summit	14F12	8795	1/6	110	29.2	8.4	9.8*
Graham Ranch	14F5	6200	12/29	54	14.6	4.4	5.7
Mount Baldy	14F9	9000	12/29	85	22.0	7.7	9.0*
Soldier Rgr. Sta.	14F11	6100	12/28	41	10.3	2.9	--

Little Wood River - Fish Creek

Garfield Rgr. Sta.	13F4	6554	1/8	63	16.8	2.4	3.9*
Muldoon	13F5	6300	1/8	45	11.5	1.9	2.8*
Porcupine (A)	14F14	8350	1/5	85	22.0	6.9	--
Swede Peak (A)	13F9	7500	1/5	85	22.0	6.4	--

RAFT RIVER

Boy Scout Camp (A)	13G2	7600	12/31	45	15.3	4.5	--
Howell Canyon	13G1	8000	1/2	63	21.5	7.9	8.6*
Summit Springs (A)	13G4	8500	12/31	21	5.7	2.4	--

GOOSE CREEK

Badger Gulch	14G3	6660	12/30	21	5.7	2.6	--
Bostetter R. S. (A)	14G1	7500	12/29	45	13.7	4.4	7.5*
Vi Pont (A)	13H3	7670	12/31	41	14.0	4.5	--

SALMON FALLS CREEK

#Bear Creek	15H1	7800	1/6	42	13.1	4.5	7.3*
#Bear Creek (A)	15H1	7800	1/4	35	8.8	4.5	7.3*
Cedar Creek (A)	14G5	7000	12/29	24	7.3	3.1	3.2*
Deadline	14G4	6900	12/26	55	16.8	6.2	8.9*
Goat Creek (A)	15H13	8800	12/29	31	7.8	4.2	6.6*
#Hummingbird Spgs. (A)	15H15	8945	1/4	61	15.2	4.5	6.8*
Magic Mountain	14G2	6700	12/26	43	13.4	5.2	7.5*
#Pole Creek R. S.	15H14	8330	12/28	44	11.0	4.9	6.5*
Red Point (A)	15H18	7940	12/29	23	5.8	3.2	--
Wilson Creek (A)	15G2	7500	12/29	24	6.0	4.5	--

(b) 1948-62, 15 year period. # Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (inches)	WATER CONTENT (inches)	WATER CONTENT (inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

BOISE RIVER

Atlanta Summit (A)	15F4	7500	1/1	114	32.4	11.5	--
Bad Bear	15F2	5500	1/6	45	11.3	3.2	--
#Bogus Basin	16F2	6120	12/31	53	13.8	7.0	9.4
Bogus Basin Road	16F4	5360	1/5	13	2.3	2.7	1.6*
Couch Summit (A)	14F10	6950	1/1	62	16.1	6.7	--
#Dollarhide Smt. (A)	14F8	8620	1/1	86	24.4	9.0	11.0*
Jackson Peak (A)	15E9	7000	1/1	99	28.1	--	--
Moores Creek Summit	15F1	6100	1/5	90	25.6	9.2	13.3
Prairie	15F6	5600	12/28	2	0.5	4.5	--
Road Creek (A)	15F3	6800	1/1	25	6.5	--	--
#Soldier Rgr. Sta.	14F11	6100	12/28	41	10.3	2.9	--
Trinity Mountain (A)	15F5	7400	1/1	117	33.2	11.5	17.9*

PAYETTE RIVER

#Big Creek Summit	15E2	6600	1/8	104	31.2	11.7	--
Bogus Basin	16F2	6120	12/31	53	13.8	7.0	9.4
Cozy Cove	15E8	5900	12/28	31	10.3	4.1	6.6*
Crawford Rgr. Sta.	15E3	4800	12/29	20	5.3	2.4	--
Deadwood Airstrip	15E10	5440	12/27	28	8.9	3.7	6.3*
Deadwood Dam	15E7	5500	12/28	38	9.9	4.7	7.2*
Deadwood Summit	15E4	7000	1/1	144	40.9	16.3	--
Greenfield Flat (A)	16E7	7370	1/1	102	29.0	9.7	--
#Jackson Peak (A)	15E9	7000	1/1	99	28.1	--	--
Rock Flat Summit	16E1	5200	12/29	45	9.4	4.9	7.8
Squaw Meadow	15D2	5800	1/1	95	27.0	12.4	--

WEISER RIVER

Boulder Creek	16D1	5500	12/31	72	18.6	6.8	--
Mica Ridge (A)	16E6	6800	1/1	87	22.6	10.2	--
Squaw Flat (A)	16E5	6230	1/1	72	18.7	9.7	--

BRUNEAU RIVER

Bear Creek	15H1	7800	1/6	42	13.1	4.5	7.3*
Bear Creek (A)	15H1	7800	1/4	35	8.8	4.5	7.3*
Hummingbird Spgs. (A)	15H15	8945	1/4	61	15.2	4.5	6.8*
Pole Creek Rgr. Sta.	15H14	8330	12/28	44	11.0	4.9	6.5*
#Seventy-six Creek (A)	15H3	7100	1/4	26	6.5	--	--

(b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated.

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

OWYHEE RIVER

#Bear Creek	15H1	7800	1/6	42	13.1	4.5	7.3*
#Bear Creek (A)	15H1	7800	1/4	35	8.8	4.5	7.3*
#Seventy-six Creek(A)	15H3	7100	1/4	26	6.5	--	--
South Mountain	16G1	6340	12/28	27	8.3	3.2	4.5*

LATE REPORTSUPPER SALMON RIVER

Borah (A)	13E8	8250	1/8	24	5.9	2.6	--
Twin Peaks (A)	14E3	10300	1/8	114	30.2	10.0	--

Lemhi River

Aspen-Hall Pass	13E21	8110	1/8	48	11.7	3.8	--
Copes Camp	13E17	7500	1/8	37	9.0	2.8	--
Hall Creek	13E20	7560	1/8	27	6.6	1.3	--
Schwartz Lake	13E16	8500	1/8	61	14.2	5.1	--

(b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

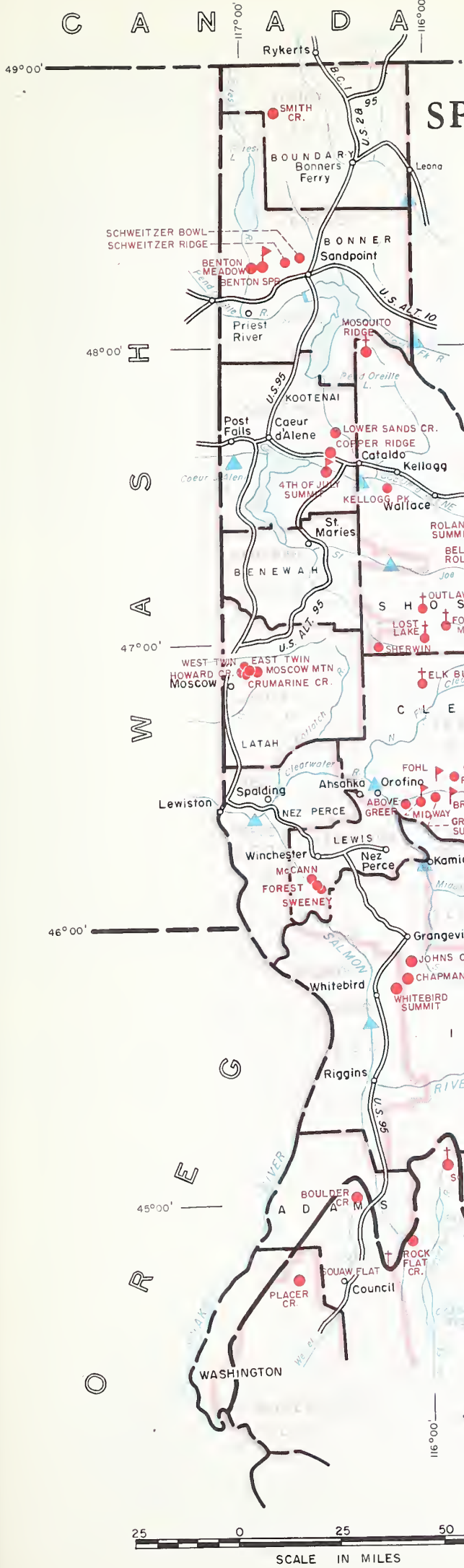
## APPENDIX

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE <sup>b</sup>

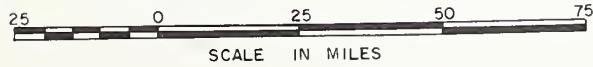
(b) 1948-62, 15 year period. # Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated.





# KOOTENAI, PEND OREILLE, SPOKANE, PALOUSE, CLEARWATER, SALMON WATERSHEDS

- ### LEGEND
- Watershed Boundary
  - Soil Conservation District Bdry.
  - County Boundary
  - Forecast Point
  - Snow Course
  - Aerial Snow Depth Gage
  - Soil Moisture Station



# INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. LAT.	TWP. OR ANO	RGE. LONG.	ELEV.
<b>KOOTENAI RIVER</b>						
16A1	I	Smith Creek	29	64N	3W	4800
<b>PRIEST RIVER</b>						
16A2	I	Benton Meadow	27	58N	4W	2344
16A3M	I	Benton Spring	30	58N	3W	4900
16A6	I	Schweitzer Bowl	20	2W	58N	4500
16A5	I	Schweitzer Ridge	19	2W	58N	6100
<b>SPOKANE RIVER</b>						
15B8	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	34	47N	6E	3770
16B2	I	Copper Ridge	6 & 7	50N	1W	4800
16B3M	I	Fourth of July Summit	6	49N	1W	3100
15B13A	I	Granite Peak	3	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2M	I	Lookout	4	47N	6E	5250
16B1	I	Lower Sands Creek	32	51N	1W	3400
15B4A	I	Medicine Ridge	24	43N	10E	6150
16A4A	I	Mosquito Ridge	5	54N	2E	5110
15B12	I	Outlaw Creek	19	44N	5E	3750
15B5A	I	Roland Summit	26	47N	6E	5200
16C1	I	Sherwin	28 & 33	42N	1E	3200
15B9A	I	Sunset	28	49N	5E	5600
<b>BIG LOST RIVER</b>						
14F15a	I	North Fork Meadow	20	7N	18E	8150
<b>BIG WOOD RIVER</b>						
14F12M	I	Galena Summit	33	7N	15E	8795
<b>PAYETTE RIVER</b>						
15E2M	I	Big Creek Summit	24	15N	5E	6608
15E4A	I	Deadwood Summit	23	14N	7E	7000
16E1	I	Rock Flat Summit	1	18N	2E	5200
15D2A	I	Squaw Meadow	5	21N	4E	5800
<b>WEISER RIVER</b>						
16D1	I	Boulder Creek	15	20N	1W	5500
16E5a	I	Squaw Flat	32	17N	2E	6230
16E2	I	Placer Creek	15 & 16	17N	3W	6000
<b>SALMON RIVER</b>						
13E19AM	I	Above Gilmore	13	13N	26E	8200
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
13E11m	I	Big Flat	25	11N	23E	7050
13E8a	I	Borah	21	10N	23E	8250

NO.	STATE	NAME	SEC. LAT.	TWP. OR ANO	RGE. LONG.	ELEV.
16D2	I	Chapman Creek	16	29N	2E	4215
13E17A	I	Copes Camp	36	18N	22E	7500
13D17a	I	Gertson Creek	22	22N	23E	8050
13D2	M	Gibbons Pass	4	2S	19W	7100
13D9	M	Gold Stone	11	8S	16W	8100
13E20A	I	Hall Creek	1	16N	27E	7560
16D3	I	Johns Creek	9	29N	2E	3805
13E1	M	Lemhi Pass	9	10S	15W	7480
13E13m	I	Lower Big Flat	31	12N	24E	6500
13E10m	I	Mahogany Bar	10	10N	23E	7900
13E18AM	I	Meadow Lake	24	13N	26E	9100
14E1MA	I	Mill Creek Summit	8	13N	17E	8870
13D16	I	Moose Creek	22 & 26	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
14E2	I	Redfish Lake	3	9N	13E	6600
13E16A	I	Schwartz Lake	34	18N	22E	8500
13E2	M	Trail Creek	15	10S	15W	7090
14E3a	I	Twin Peaks	28	15N	17E	9190
14F4A	I	Vienna Mine	32	6N	14E	8900
13E12m	I	West Big Flat	35	12N	23E	6550
16D5	I	Whitebird Summit	17	29N	2E	4390
14D4	I	Williams Creek Summit	34	21N	20E	7800
<b>CLEARWATER RIVER</b>						
16C11	I	Above Greer	14	35N	2E	1240
16C14m	I	Brown	11	35N	3E	3100
15C3A	I	Cayuse Airstrip	4	38N	11E	3700
15C7	I	Coolwater Mountain	32	33N	8E	6200
15C9A	I	Crater Meadows	2	37N	9E	6100
16C15A	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	35	35N	11E	5000
15C8m	I	Fohl	16	36N	5E	3450
16C9	I	Forest	1	32N	3W	4550
15B3	I	Forty-nine Meadows	6	43N	5E	5000
14C9A	I	Goat Lake	4	38N	13E	6600
16C13	I	Greer Summit	13	35N	2E	3000
15C6A	I	Hemlock Butte	12	36N	6E	5500
14D3	I	Kit Carson Pasture	4	27N	16E	5020
14C5	M	Lolo Pass	11	10N	24W	5230
15B14A	I	Lost Lake	16	43N	4E	6000
16C8	I	McCann	25	33N	3W	4300
16C12M	I	Midway	14	35N	2E	2200
14D1	M	Nezperce Pass	25	1S	24W	6575
15D4	I	Orogrande Mountain	24	27N	6E	7800
15C5	I	Pierce Ranger Station	2	36N	5E	3171
14C6	I	Powell Ranger Station	33	37N	14E	4230
14C4	I	Savage Pass	18	36N	15E	6600
15C4A	I	Shanghai Summit	7	37N	6E	4600
16C10	I	Sweeney	1	32N	3W	4435
<b>PALOUSE RIVER</b>						
16C6	I	Crumarine Creek	24	40N	5W	3500
16C3	I	East Twin	13	40N	5W	4000
16C5	I	Howard Creek	14	40N	5W	3500
16C2	I	Moscow Mountain	18	40N	4W	4800
16C4	I	West Twin	14	40N	5W	4200

## LEGEND

### Numbering System (example)

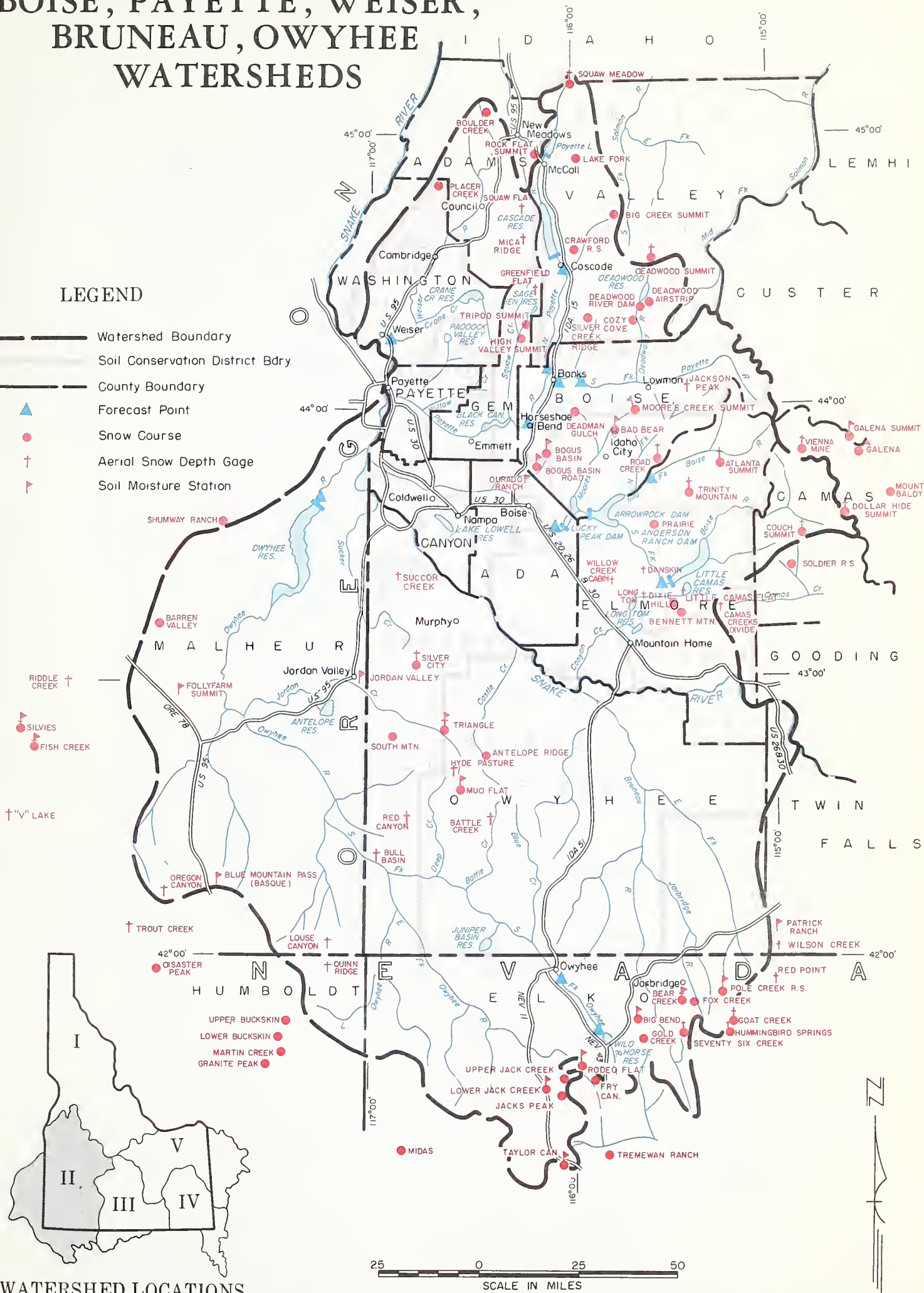
10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.



# BOISE, PAYETTE, WEISER, BRUNEAU, OWYHEE WATERSHEDS

## LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- † Aerial Snow Depth Gage
- ⚑ Soil Moisture Station



WATERSHED LOCATIONS



# INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. TWP. RGE. ELEV.			
			LAT.	OR ANO LONG.		
SALMON FALLS CR. - BRUNEAU RIVER						
15H1MA	N	Bear Creek	31	46N	58E	7800
14G5A	I	Cedar Creek	25	15S	13E	7000
14G4M	I	Deadline	25	14S	18E	6900
15H2	N	Fox Creek	33	46N	58E	6800
15H13A	N	Goat Creek	31	46N	60E	8800
15H15A	N	Hummingbird Springs	6	45N	60E	8945
14H1	N	Jakes Creek	6	42N	62E	7000
14G2	I	Magic Mountain	14	14S	18E	6700
15G1m	I	Patrick Ranch	23	15S	12E	5720
15H14M	N	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	N	Red Point	15	47N	61E	7940
15H3A	N	Seventy Six Creek	6	44N	58E	7100
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2a	I	Wilson Creek	24	16S	12E	7500
BIG WOOD RIVER						
14F8A	I	Dollar Hide Summit	16	3N	15E	8620
14F1M	I	Galena	3	6N	15E	7300
14F12M	I	Galena Summit	33	7N	15E	8795
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100
BOISE RIVER						
15F4A	I	Atlanta Summit	29	5N	10E	7500
15F2M	I	Bad Bear	35	7N	6E	5500
15F7	I	Bennett Mountain	7	2S	9E	6650
16F4	I	Bogus Basin Road	32	5N	3E	5360
16F5m	I	Bogus Basin Road	36	5N	2E	4830
15F9a	I	Camas Creeks Divide	11	2S	9E	5720
14F10A	I	Couch Summit	9	2N	14E	6950
15F10a	I	Danskin	17	1N	7E	5650
16F1	I	Deadman Gulch	24	7N	3E	6500
15F8	I	Dixie Hill	13	2S	8E	5230
15E9A	I	Jackson Peak	7	8N	9E	7000
15F12a	I	Little Camas Flat	21	1S	9E	4950
15F13a	I	Long Tom	19	1S	8E	4550
15F1M	I	Moore's Creek Summit	19	7N	7E	6100
15F6	I	Prairie	13	2N	7E	5600
15F3A	I	Road Creek	5	5N	8E	6800
15F5A	I	Trinity Mountain	7	3N	9E	7400
15F11a	I	Willow Creek Cabin	26	1N	6E	4710
OWYHEE RIVER						
16G6	I	Antelope Ridge	20	8S	1E	5900
18F5	O	Barren Valley	26	27S	38E	4200
16G9a	I	Battle Creek	10	11S	1E	5700
15H4M	N	Big Bend	30	45N	56E	6700
17G2m	O	Blue Mountain Pass (Basque)	4	38S	42E	5290
16G10a	I	Bull Basin	29	12S	6W	5600
18H1	N	Disaster Peak	8	47N	34E	6500
18G2MA	O	Fish Creek	4	33S	33E	7900
18G3m	O	Folly Farm Summit	8	30S	38E	4450
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
17H4	N	Granite Peak	22	44N	39E	7800
16G5a	I	Hyde Pasture	SE 1/4 31	8S	2W	5800
16H4	N	Jacks Peak	28	42N	53E	8420
17G3m	O	Jordan Valley	2	30S	46E	4390
16H5	N	Laurel Draw	20	45N	53E	6700
17G6a	O	Lookout Butte	2	40S	47E	5650
17G4a	O	Louse Canyon	27	40S	44E	6440
17H2	N	Lower Buckskin	25	45N	39E	6700
16H1M	N	Lower Jack Creek	18	42N	53E	6800
17H3	N	Martin Creek	18	44N	40E	6700
16H3	N	Midas	18	39N	46E	7200
16G7M	I	Mud Flat	34	9S	2W	5500
17G5a	O	Oregon Canyon	9	40S	40E	6950
17H6a	N	Quinn Ridge	9	47N	41E	6300
16G11a	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800

NO.	STATE	NAME	SEC. TWP. RGE. ELEV.			
			LAT.	OR ANO	LONG.	
16F3A	I	Silver City	6	5S	3W	6400
18G1MA	O	Silvies	35	32S	33E	6900
16G1	I	South Mountain	35	7S	5W	6340
16F6a	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
15H8	N	Tremewan Ranch	9	39N	53E	5700
16G4AM	I	Triangle	N 1/2 25	7S	3W	5150
18G5a	O	Trout Creek	10	41S	38E	7800
17H1	N	Upper Buckskin	11	45N	39E	7200
16H2	N	Upper Jack Creek	9	42N	53E	7250
18G7a	O	"V" Lake	31	35 1/2 S	32 3/4 E	6600

## PAYETTE RIVER

15E2	I	Big Creek Summit	24	15N	5E	6608
16F2M	I	Bogus Basin	16	5N	3E	6120
15E8	I	Cozy Cove	19	11N	7E	5900
15E3	I	Crawford Ranger Station	21	14N	4E	4800
15E10	I	Deadwood Airstrip	8	11N	7E	5440
15E7	I	Deadwood River Dam	8	11N	7E	5290
15E4A	I	Deadwood Summit	23	14N	7E	7000
16E7a	I	Greenfield Flat	1	13N	2E	7370
16E4	I	High Valley Summit	9	10N	2E	5170
15E1	I	Lake Fork	3	18N	4E	6000
16E1	I	Rock Flat Summit	1	18N	2E	5200
15E5A	I	Silver Creek Ridge	24	12N	5E	5700
15D2A	I	Squaw Meadow	5	21N	4E	5800
16E3	I	Tripod Summit	17	11N	3E	5200

## WEISER RIVER

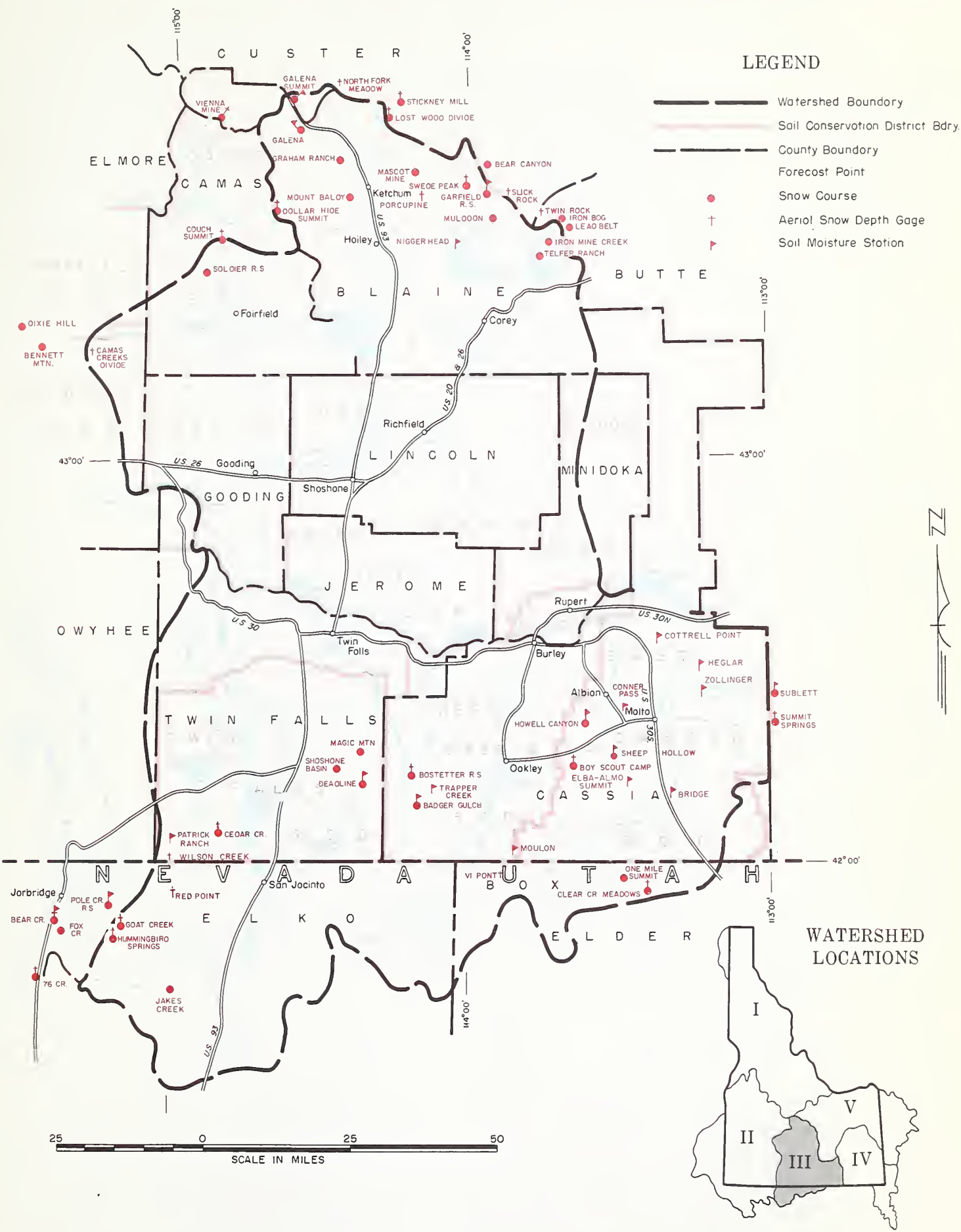
16D1	I	Boulder Creek	15	20N	1W	5500
16E6a	I	Mica Ridge	15	15N	2E	6800
16E5a	I	Squaw Flat	32	17N	2E	6230
16E2	I	Placer Creek	15 & 16	17N	3W	6000

## LEGEND

### Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

# SNAKE RIVER, BIG WOOD, LITTLE WOOD, RAFT, GOOSE CREEK, SALMON FALLS CREEK WATERSHEDS



# INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. TWP.		RGE. ELEV.	
			OR			
			LAT.	AND	LONG.	
RAFT RIVER						
13G2A	I	Boy Scout Camp	12	14S	23E	7600
13G11m	I	Bridge	7	15S	27E	4750
13H2A	U	Clear Creek Meadows	26	14N	14W	9050
13G6	I	Conner Pass	35	12S	25E	5700
13G7m	I	Cottrell Point	24	10S	25E	4490
13G10m	I	Elba-Almo Summit	29	14S	25E	5690
13G8m	I	Heglar	19	11S	28E	4590
13G1M	I	Howell Canyon	2	13S	24E	8000
13G12m	I	Moulton	27	16S	23E	5950
13H1	U	One Mile Summit	19	14N	14W	7330
13G5M	I	Sheep Hollow	4	14S	24E	6200
13G3M	I	Sublett	8	12S	30E	6000
13G4A	I	Summit Springs	15	13S	30E	8500
13G9m	I	Zollinger	2	13S	28E	5000

## GOOSE - TRAPPER CREEK

14G3M	I	Badger Gulch	24	15S	19E	6660
14G1A	I	Bostetter Ranger Station	35	14S	19E	7500
14G7m	I	Trapper Creek	2	15S	20E	5300
13H3a	U	Vi Pont	17	14N	17W	7670

## SALMON FALLS CR. - BRUNEAU RIVER

15H1MA	N	Bear Creek	31	46N	58E	7800
14G5A	I	Cedar Creek	25	15S	13E	7000
14G4M	I	Deadline	25	14S	18E	6900
15H2	N	Fox Creek	33	46N	58E	6800
15H13A	N	Goat Creek	31	46N	60E	8800
15H15A	N	Hummingbird Springs	6	45N	60E	8945
14H1	N	Jakes Creek	6	42N	62E	7000
14G2	I	Magic Mountain	14	14S	18E	6700
15G1m	I	Patrick Ranch	23	15S	12E	5720
15H14M	N	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	N	Red Point	15	47N	61E	7940
15H3A	N	Seventy Six Creek	6	44N	58E	7100
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2a	I	Wilson Creek	24	16S	12E	7500

## BIG WOOD RIVER

14F8A	I	Dollar Hide Summit	16	3N	15E	8620
14F1M	I	Galena	3	6N	15E	7300
14F12M	I	Galena Summit	33	7N	15E	8795
14F5	I	Graham Ranch	10	5N	17E	6200
14F7	I	Mascot Mine	8	4N	20E	7900
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100

## LITTLE WOOD RIVER

13F4M	I	Garfield Ranger Station	11	3N	21E	6554
13F10	I	Iron Mine Creek	32	3N	23E	6370
13F5	I	Muldoon	25	3N	21E	6300
14F13m	I	Niggerhead	26	2N	20E	5450
14F14a	I	Porcupine	30	4N	20E	8350
13F9A	I	Swede Peak	4	3N	21E	7500
13F6	I	Telfer Ranch	12	2N	22E	6000

## LEGEND

### Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	PRECIPITATION GAGE ONLY.





# INDEX to SNOW COURSES

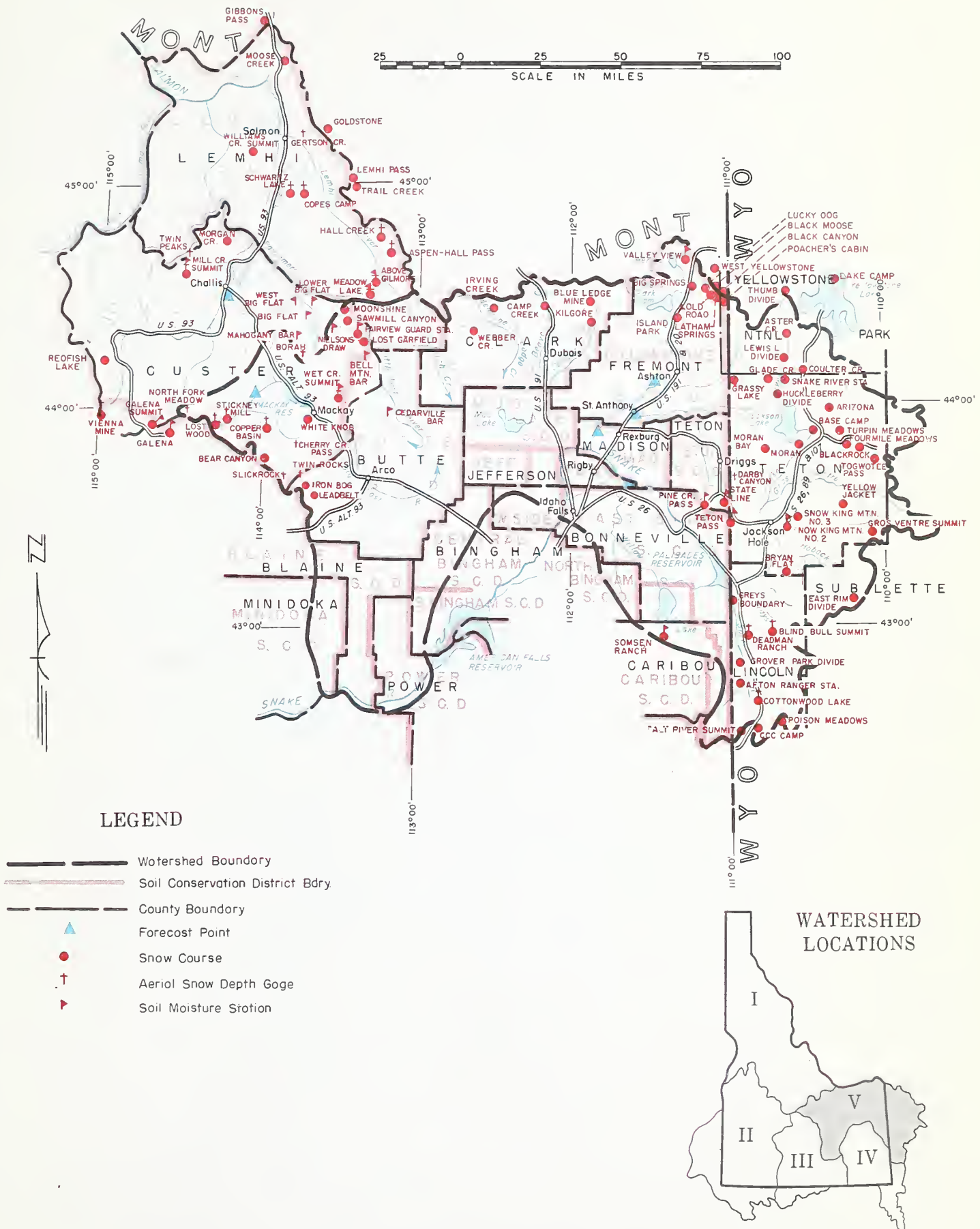
NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.	NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
SNAKE RIVER - WYOMING							PORTNEUF RIVER						
10G4	WY	Afton Ranger Station	30	32N	118W	6200	12G5M	I	Dempsey Creek	17	10S	38E	6280
10F1	WY	Arizona	3	46N	115W	6850	12G7m	I	Lower Dempsey	5	10S	38E	5210
10E8	WY	Aster Creek	44°17'		110°38'	7700	12G6m	I	Lower Pebble	7	8S	38E	5300
10F2	WY	Base Camp	20	46N	113W	6900	12G1	I	Mink Creek	33	7S	34E	6300
10F7	WY	Blackrock	4	44N	111W	8600	12G2M	I	Pebble Creek	34	7S	37E	6550
10G2A	WY	Blind Bull	6	34N	115W	8750	BEAR RIVER						
10F14	WY	Bryan Flat	9	38N	115W	6250	10G11	Wy	Big Park	7	27N	117W	8700
10E3	WY	Canyon	44°44'		110°30'	7750	11G11	I	Christensen Ranch	27	13S	41E	5600
10G7	WY	CCC Camp	9	29N	118W	7500	11G12	I	Cub River Ranger Station	5	15S	41E	5400
10G5A	WY	Cottonwood Lake	25	31N	118W	7500	11G14a	I	Dry Basin	30	13S	42E	7900
10E10	WY	Coulter Creek	44°09'		110°33'	7600	11H13MP	U	Dry Bread Pond	19	8N	4E	8230
10G1A	WY	Deadman Ranch	26	34N	116W	6534	11G6M	I	Emigrant Summit	21	12S	42E	7350
10F17	WY	East Rim Divide	32	37N	111W	7950	11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
10F6	WY	Four Mile Meadows	35	45N	112W	7770	11G8M	I	Franklin Basin	1	16S	41E	8000
10E13	WY	Glade Creek	12	48N	116W	7200	11H7P	U	Garden City Summit	35	14N	4E	7600
10F18	WY	Greys Boundary	33	37N	118W	5800	10J6	U	Goodman Ranch	19	3N	10E	7900
10F19	WY	Gros Ventre Summit	36	40N	111W	8750	10J7	U	Hayden Fork	1	1S	9E	9300
10G3	WY	Grover Park Divide	27	33N	118W	7500	11G15a	I	Horseshoe Basin	31	13S	42E	8000
10E14	WY	Huckleberry Divide	32	48N	115W	7300	10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
10E4	WY	Lake Camp	44°34'		110°24'	7850	11G13A	I	Liberty Spring	7	13S	42E	8600
10E9	WY	Lewis Lake Divide	44°13'		110°40'	7900	11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10F4	WY	Moran	8 & 17	45N	114W	6800	10G10	W	Piney LaBarge x	19	29N	114W	8820
10F3	WY	Moran Bay	14	45N	116W	6800	10J17P	U	Stillwater Camp	32	2N	10E	8550
10E2	WY	Norris Basin	44°44'		110°42'	7500	11G10	I	Strawberry Mink Divide	14	13S	41E	6800
10G6	WY	Poison Meadows	29	30N	116W	8500	11G9M	I	Strawberry Creek	9	13S	41E	5800
10G8	WY	Salt River Summit	32	29N	118W	7900	11G4P	I	Willow Flat	2	15S	41E	6100
10E12	WY	Snake River Station	9	48N	115W	6780	MALAD RIVER						
10F20	WY	Snow King Mountain #3	4	40N	117W	7600	12G4	I	Dry Creek Flat	31	13S	37E	6350
10E5	WY	Sylvan Pass	12	52N	110W	7100	12G3	I	Oxford Mountain	32	13S	37E	6800
10E7	WY	Thumb Divide	44°22'		110°35'	7900	MONTPELIER CREEK						
10F9	WY	Togwotee Pass	29	44N	110W	9600	11G16	I	Giveout	35	11S	45E	6840
10F5	WY	Turpin Meadows	14	45N	112W	6930	11G17m	I	Giveout Pass	2	12S	45E	7025
10F10	WY	Yellowjacket	33	42N	112W	7675	11G19m	I	Jenson Ranch	15	12S	45E	6580
TETON RIVER							11G20	I	Little Beaver	26	11S	45E	6970
10F21a	WY	Darby Canyon	28	43N	118W	8250	11G18	I	Montpelier Creek	22	12S	45E	6570
11F2M	I	Pine Creek Pass	24	3N	44E	6750	11G21	I	Whiskey Flat	26	11S	45E	6985
11F1M	I	State Line	32	3N	46E	6400							
10F13M	WY	Teton Pass	24	41N	118W	8500							
BLACKFOOT RIVER													
11G3	I	Austin Brothers Ranch	28	7S	43E	6450							
11G2M	I	China Hat	17	7S	42E	6300							
11G5	I	Slug Creek Divide	15	10S	44E	7225							
11G1M	I	Somsen Ranch	25	5S	43E	7000							

## LEGEND

### Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

# UPPER SNAKE, HENRY'S FORK, TETON, CAMAS - BEAVER CREEK, LITTLE LOST, BIG LOST, UPPER SALMON WATERSHEDS





## INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR ANO	LONG.	
SNAKE RIVER - WYOMING						
10G4	WY	Afton Ranger Station	30	32N	118W	6200
10F1	WY	Arizona	3	46N	115W	6850
10E8	WY	Aster Creek	44°17'		110°38'	7700
10F2	WY	Base Camp	20	46N	113W	6900
10F7	WY	Blackrock	4	44N	111W	8600
10G2A	WY	Blind Bull	6	34N	115W	8750
10F14	WY	Bryan Flat	9	38N	115W	6250
10E3	WY	Canyon	44°44'		110°30'	7750
10G7	WY	CCC Camp	9	29N	118W	7500
10G5A	WY	Cottonwood Lake	25	31N	118W	7500
10E10	WY	Coulter Creek	44°09'		110°33'	7600
10G1A	WY	Deadman Ranch	26	34N	116W	6534
10F17	WY	East Rim Divide	32	37N	111W	7950
10F6	WY	Four Mile Meadows	35	45N	112W	7770
10E13	WY	Glade Creek	12	48N	116W	7200
10F18	WY	Greys Boundary	33	37N	118W	5800
10F19	WY	Gros Ventre Summit	36	40N	111W	8750
10G3	WY	Grover Park Divide	27	33N	118W	7500
10E14	WY	Huckleberry Divide	32	48N	115W	7300
10E4	WY	Lake Camp	44°34'		110°24'	7850
10E9	WY	Lewis Lake Divide	44°13'		110°40'	7900
10F4	WY	Moran	8 & 17	45N	114W	6800
10F3	WY	Moran Bay	14	45N	116W	6800
10E2	WY	Norris Basin	44°44'		110°42'	7500
10G6	WY	Poison Meadows	29	30N	116W	8500
10G8	WY	Salt River Summit	32	29N	118W	7900
10E12	WY	Snake River Station	9	48N	115W	6780
10F20	WY	Snow King Mountain #3	4	40N	117W	7600
10E5	WY	Sylvan Pass	12	52N	110W	7100
10E7	WY	Thumb Divide	44°22'		110°35'	7900
10F9	WY	Togwotee Pass	29	44N	110W	9600
10F5	WY	Turpin Meadows	14	45N	112W	6930
10F10	WY	Yellowjacket	33	42N	112W	7675

## HENRYS FORK RIVER

11E9	I	Big Springs	34	14N	44E	6500
11E18	I	Black Canyon	11	13N	45E	7850
11E19	I	Black Moose	33	14N	45E	8125
10E15	WY	Grassy Lake	6	48N	117W	7230
11E10M	I	Island Park	29	13N	43E	6315
11E16	I	Latham Springs	9	13N	45E	7650
11E14	I	Lucky Dog	2	13N	45E	6900
11E15	I	Old Road	12	13N	44E	7250
11E17	I	Poacher's Cabin	11	13N	45E	8000
11E3M	I	Valley View	7	15N	44E	6500
11E7	M	West Yellowstone	34	13S	5E	6700

## TETON RIVER

10F21a	WY	Darby Canyon	28	43N	118W	8250
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6400
10F13M	WY	Teton Pass	24	41N	118W	8500

CAMAS - BEAVER CREEK

11E11	I	Blue Ledge Mine	27	13N	33E	6700
12E3	I	Camp Creek	21	13N	36E	6800
11E12	I	Kilgore	6	12N	39E	6200

## MEDICINE LODGE CREEK

12E4	I	Irving Creek	8	13N 33E	7035
12E5	I	Webber Creek	23	12N 32E	6700

LITTLE LOST RIVER

13F16m	I	Cedarville Bar	31	7N	28E	5400
13E5M	I	Fairview Guard Station	27	12N	26E	6750
13E15m	I	Bell Mtn. Bar	36	11N	26E	6620
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6	I	Moonshine	31	13N	26E	7450
13E14m	I	Nielson's Draw	26	11N	25E	6200
13E4	I	Sawmill Canyon	17	12N	26E	6900
13E7MA	I	Wet Creek Summit	15	8N	25E	8175

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	
BIG LOST RIVER						
13F3	I	Bear Canyon	26	5N	21E	8600
13F13a	I	Cherry Creek Pass	7	5N	23E	8900
13F2A	I	Copper Basin	24	6N	21E	8000
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6800
14F3A	I	Lost Wood Divide	19	6N	19E	8750
14F15a	I	North Fork Meadow	20	7N	18E	8150
13F14a	I	Slickrock	17	4N	22E	8640
14F2A	I	Stickney Mill	9	6N	19E	7500
13F15a	I	Twin Rocks	22	4N	22E	8100
13F1	I	White Knob	25	7N	23E	7700

## BIG WOOD RIVER

14F11M	I	Galena	3	6N	15E	7300
14F12M	I	Galena Summit	33	7N	15E	8795

## SALMON RIVER

13E19AM	I	Above Gilmore	13	13N	26E	8200
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
13E11m	I	Big Flat	25	11N	23E	7050
13E8a	I	Borah	21	10N	23E	8250
13E17A	I	Copes Camp	36	18N	22E	7500
13D17a	I	Gertson Creek	22	22N	23E	8050
13D2	M	Gibbons Pass	4	2S	19W	7100
13D9	M	Gold Stone	11	8S	16W	8100
13E20A	I	Hall Creek	1	16N	27E	7560
13E1	M	Lemhi Pass	9	10S	15W	7480
13E13m	I	Lower Big Flat	31	12N	24E	6500
13E10m	I	Mahogany Bar	10	10N	23E	7900
13E18AM	I	Meadow Lake	24	13N	26E	9100
14E1MA	I	Mill Creek Summit	8	13N	17E	8870
13D16	I	Moose Creek	22 & 26	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
14E2	I	Redfish Lake	3	9N	13E	6600
13E16A	I	Schwartz Lake	34	18N	22E	8500
13E2	M	Trail Creek	15	10S	15W	7090
14E3a	I	Twin Peaks	28	15N	17E	9190
14F4A	I	Vienna Mine	32	6N	14E	8900
13E12m	I	West Big Flat	35	12N	23E	6550
14D4	I	Williams Creek Summit	34	21N	20E	7800

### LEGEND

### Numbering System (example)

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# Agencies Assisting with Snow Surveys, etc.

## GOVERNMENT AGENCIES

### Canada:

Department of Lands, Forests, and  
Water Resources, British Columbia  
Department of Resources and Development,  
Water Resources Division

### States:

Idaho State Reclamation Engineer  
State of Idaho Department of Fish and Game  
University of Idaho  
Idaho State University  
Montana Agricultural Experiment Station  
Montana State Water Conservation Board  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon State Engineer and Corps of  
State Watermasters  
Utah Cooperative Snow Surveys  
Wyoming Cooperative Snow Surveys

### Federal:

U. S. Army Engineers  
  
U. S. Department of Agriculture  
Forest Service  
Agricultural Research Service  
  
U. S. Department of Commerce  
Weather Bureau  
  
U. S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Geological Survey  
Indian Service  
National Park Service  
Bureau of Land Management

## PUBLIC UTILITIES

The Montana Power Company  
Washington Water Power Company  
Idaho Power Company  
Utah Power and Light Company

## ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District  
Boise Project Board of Control  
Little Wood River Irrigation District  
Jordan Valley Irrigation District  
Salmon Falls Creek Irrigation Company  
Twin Falls Soil Conservation District  
Twin Lakes Irrigation Company  
Big Wood Irrigation Company  
Owyhee Project - North & South Board of Control

## PRIVATE CORPORATIONS

Amalgamated Sugar Company

*Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.*

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with the Snow Survey"*